Water Integration Project Meeting Minutes
February 5, 2003, ID-N

Attendees:

Jan Brown	INEEL	browjm@inel.gov
Doug Jorgensen	INEEL	dkj@inel.gov
Kendall Kincaid	DOE-ID	kincaikl@id.doe.gov
LeRoy Knobel	USGS	llknobel@usgs.gov
Steve Kowall	INEEL	kowasj@inel.gov
Marianne Little	INEEL	lit@inel.gov
Marilynne Manguba	INEEL	mangma@inel.gov
Travis McLing	INEEL	tm1@inel.gov
Erick Neher	INEEL	neheer@inel.gov
Brennon Orr	North Wind, Inc.	borr@nwindenv.com
Jeff Perry	DOE-ID	perryjn@id.doe.gov
Bob Smith	University of Idaho	smithbob@uidaho.edu
Paul Wichlacz	INEEL	plw@inel.gov
Tom Wood	INEEL	tqw@inel.gov
Al Yonk	INEEL	yonkak@inel.gov

Via Conference Call

Tony Kluk	DOE-HQ	anthony.kluk@em.doe.gov)
E. B. Nuckols	DOE-Carlsbad	eb.nuckols@wipp.ws
Gary Winter	Idaho Dept. of Env. Quality	gwinter@deq.state.id.us

Safety Share

Paul shared a website on stress that provides lots of very valuable information about stress and how to cope with and reduce stress. http://employees.ford.com/js/stress/html/brand.htm

Progress on the Conceptual Model Summary Document

Paul Wichlacz presented information on the INEEL Subregional Conceptual Model Report Volume 1 - Summary of Existing Knowledge of Natural and Anthropogenic Influences Governing Subsurface Contaminant Transport in the INEEL Subregion of the Eastern Snake River Plain.

The Summary Document is the first part of the effort to develop an INEEL subregional scale conceptual model of contaminant fate and transport. The document was prepared by North Wind, Inc. (Brennon Orr) with the guidance of the Conceptual Model Advisory Group (CMAG) and has been reviewed by the CMAG and others. Information on geochemistry is being added to the document.

The summary of source term inventory and release mechanisms is being developed. The Source Term Team has met twice and will meet on February 6 to look at source term information for RWMC. The Team has agreed on a process that looks at each facility separately and will be bringing in subject matter experts from each facility to pull the data together.

Tom Wood has agreed to be the technical lead on development of a summary of vadose zone information. This effort will be based on the original deficiencies document prepared in 1999.

USGS will be developing a geologic framework using EarthVision software. A kickoff meeting for this effort will be held on February 20. Phase 1 will be implementation of the geologic framework, collecting digital elevation maps, geologic maps, lithologic and geophysical logs, paleomagnetic data and data from boreholes and inputting this to EarthVision. If the results of Phase 1 are judged to be useful, USGS will proceed to Phase 2, collecting the non-geologic data (temperature, contaminant plumes, groundwater flow and contaminant transport modeling, and geostatistical characteristics). A July workshop will be held so all interested parties can provide input.

Brennon Orr provided information on the findings in the Summary document, the information in Chapter 2 that focuses on the components of the two subregional conceptual models (USGS and WAG-10) where they are the same and where they are different. Chapter 2 summarizes competing hypotheses and requirements for additional data to resolve them. Examples include:

The extent of the two models are similar. The northeast boundaries differ because the WAG-10 model set this boundary to permit use of fluxes calculated from a numeric modeling study done in the Mud Lake area. An estimated inflow of 1200 cubic feet per second (cfs) and outflow of 2400 cfs is agreed on. The source of the additional 1200 cfs could be (1) tributary underflow; (2) infiltration from the Big Lost River, (3) precipitation, and/or (4) water from a deeper system.

The effective thickness of the aquifer. There is limited data available (only seven wells have been drilled through the aquifer and all are on the INEEL). A new borehole about 2 miles S. of the Test Reactor Area goes down 1653 feet. Estimates range from greater than 1300 feet to greater than 4000 feet and are based on temperature, electrical resistivity, and borehole data.

The effects of volcanic rift zones and vent corridors, which often run at right angles, are not well understood. These may explain some of the facility-specific anomalies (e.g., contaminants found in areas that appear to be upgradient from the source).

The Conceptual Model Advisory Group is looking at all the hypotheses and ideas presented in the Summary document. The synergy developed in the group has resulted in many fruitful discussions and ongoing dialog among group members.

Other Business

Jan handed out copies of the latest edition of *Subsurface Topics*. An article on the INEEL Water Integration Project appears in this newsletter from the INEEL Subsurface Science Initiative (http://subsurface.inel.gov/).

Water Integration Project Action Tracking Log

Date	Action Lead	Action Description	Due Date	Action Status	Notes
12/04/02	Al Yonk	Completion of Draft INEEL Groundwater/Vadose Zone Monitoring Report	4/30/03	In Progress	Annotated Outline Complete
12/11/02	Al Yonk Marianne Little	Project Execution Plan	3/15/03	In Progress	1st Draft requested by 3/15/03
1/15/03	Al Yonk	Detailed Definition of R&D Science Strategy Needs	2/28/03	In Progress	
1/29/03	Paul Wichlacz	Source Term Advisory Group Meeting	2/6/03	Upcoming	3:45 p.m., IRC 303
1/29/03	Paul Wichlacz	Conceptual Model Overall Guidance Group Meeting	2/20/03	Upcoming	Check USGS presentation time on 2/20 for conflict
1/29/03	Jeff Perry	Approval of Aquifer Academy White Paper	2/5/03	In Progress	
1/29/03	Jan Brown	Tour Guide Revision	4/18/03	In Progress	

Stakeholder Presentations and Upcoming Events

Date	Milestone/Event	Lead
3/5/03	Hydrogeology Field Tours - 2003 Plans Discussion	Jan Brown
4/2/03	Mid-Year Progress Report and Discussion	Jeff Perry
5/7/03	Progress Report on Aquifer Academy Planning	Jan Brown
3/18/03	Aquifer Academy Planning Team Meeting	Jan Brown
May 2003	Science Strategy Workshops	Jan Brown/Doug Jorgensen
6/17/03	ID DEQ and IDWR Field Tour	Jan Brown
7/14/03	INEEL CAB Field Tour	Jan Brown

Adjourned at 2:10 p.m. The next meeting will be February 12th.